CITY OF MIDDLETOWN PURCHASING DEPARTMENT

ADDENDUM #4 TO BID #2014-017

BID #2014-017- Francis T. Patnaude Inter-Municipal Pumping Station Mattabassett Regionalization Project – CT-DEEP CWF-487C

Date Issued: January 22, 2014

ALL BIDDERS ARE HEREBY ADVISED OF THE FOLLOWING INFORMATION AND/OR MODIFICATIONS TO THE CONTRACT BID DOCUMENTS:

- REVISED BID OPENING
- TEMPORARY WASTE STOCKPILE AREA
- REGULATORY APPROVALS
- REVISED TABLE OF CONTENTS
- REVISED BID PROPOSAL
- REVISED DRAWINGS
- TECHNICAL SPECIFICATIONS
- PRODUCT PROPOSALS
- PROSPECTIVE BIDDER'S QUESTIONS AND ANSWERS

INVITATION TO BID

PLEASE NOTE

The date set for the receipt of proposals has been changed from

Tuesday, January 27, 2015 at 11:00 AM EST

AND EXTENDED TO

Tuesday, February 10, 2015 at 11:00 AM EST

PLEASE VERIFY THAT YOU HAVE RECEIVED THIS NOTIFICATION IN THE SPACE BELOW AND FAX OR EMAIL THIS PAGE BACK TO THE PURCHASING DEPARTMENT.

FAX: 860-638-1995 EMAIL: purchase@middletownct.go	<u>ov</u>
BIDDER ACKNOWLEDGES RECEIPT OF ADDENDUM #4:	
	COMPANY NAME

All bidders are hereby advised of the following amendments to the contract bid documents which are hereby made an integral part of the specifications for the subject project, prepared by the City of Middletown to the same extent as all other documents. All work shall conform to the standards and provisions of same. Bids submitted shall be deemed to include contract document information as shown in Addendum No. 1, and ALL addendums issued. General bidders shall notify sub-bidders that may be affected by this addendum as applicable. Bidders shall be required to acknowledge receipt of this addendum in the space provided on the Bid Proposal Form.

Failure to acknowledge receipt of this addendum by the bidder may result in the rejection of their bid. Bidders are directed to review changes to all portions of the work as changes to one portion may affect the work of another.

Total Addendum: 24 pages

***BIDDER NOTE: If you have already submitted a bid you shall be required to acknowledge receipt of this addendum under separate cover in a sealed envelope clearly marked with the bid number and description. This acknowledgment must be received by the time and date specified to be accepted by the City.

Donna L. Imme, CPPB Supervisor of Purchases

ADDENDUM #4 TO BID #2014-017

BID #2014-017- Francis T. Patnaude Inter-Municipal Pumping Station Mattabassett Regionalization Project – CT-DEEP CWF-487C

ITEM #1 – REVISED BID OPENING

The Bid Opening has been changed from Tuesday, January 27, 2015 at 11:00 am to <u>TUESDAY</u>, <u>FEBRUARY 10, 2015 AT 11:00 AM EST</u>. Please use the Bid Return Label included in the revised Bid Proposal attached to this Addendum #4.

ITEM #2 – TEMPORARY WASTE STOCKPILE AREA

As stated previously in Addendum #3, the Owner is currently investigating a site for the Temporary Waste Stockpile Area (WSA). The WSA will be located within five (5) miles from the project site. No further information is available for bidders at this time. Final details on the WSA location will be furnished to the Contractor by change directive.

ITEM #3 – REGULATORY APPROVALS

The terms and conditions of the U.S. Army Corps of Engineers General Permit Number NAE-2012-571 are hereby made part of this Contract. Add the attached Exhibit "F" to the Specifications.

<u>ITEM #4 – REVISED TABLE OF CONTENTS</u>

Delete the Table of Contents in its entirety and replace with the revised Table of Contents attached to this Addendum #4.

<u>ITEM #5 – REVISED BID PROPOSAL</u>

Delete Sections 2 and 3 (pp. BID-1 through BID-39) in their entirety and replace with the revised Sections 2 and 3 (pp. BID-1 through BID-41) attached to this Addendum #4.

ITEM #6 – REVISED DRAWINGS

- 1. Replace Drawing G-0.3 (Legend of Symbols) with the revised Drawing G-0.3 attached to this Addendum #4. Revised legend.
- 2. Replace Drawing G-0.4 (Notes & Sequence of Construction) with the revised Drawing G-0.4 attached to this Addendum #4. Revised various notes.
- 3. Replace Drawing C-1.1 (Existing Conditions Plan) with the revised Drawing C-1.1 attached to this Addendum #4. Added project benchmark and added various callouts to existing features.
- 4. Drawing C-1.2 (Demolition Plan) with the revised Drawing C-1.2 attached to this Addendum #4. Added callouts to remove and dispose existing concrete chamber and monitoring well.
- 5. Replace Drawing C-1.3 (Proposed Site Plan) with the revised Drawing C-1.3 attached to this Addendum #4. Added cast stone curb and washed stone perimeter adjacent to proposed Pump Station Building.
- 6. Replace Drawing C-1.4 (Grading & Drainage Plan) with the revised Drawing C-1.4 attached to this Addendum #4. Added cast stone curb and washed stone perimeter adjacent to proposed Pump Station Building. Deleted spot elevations from proposed Surge Tank foundation slab. Deleted proposed CB-3 and 12" RCP.

- 7. Replace Drawing C-1.5 (Yard Piping Plan) with the revised Drawing C-1.5 attached to this Addendum #4. Deleted proposed CB-3 and 12" RCP. Revised and added various callouts. Revised proposed gas and water service lines. Added cast stone curb and washed stone perimeter adjacent to proposed Pump Station Building. Added note regarding maintenance of sewage flows.
- 8. Replace Drawing C-1.6 (Landscaping Plan) with the revised Drawing C-1.6 attached to this Addendum #4. Added cast stone curb and washed stone perimeter adjacent to proposed Pump Station Building for consistency with the Architectural Drawings.
- 9. Replace Drawing C-1.7 (Erosion & Sedimentation Control Plan) with the revised Drawing C-1.7 attached to this Addendum #4. Deleted proposed CB-3 and 12" RCP. Added cast stone curb and washed stone perimeter adjacent to proposed Pump Station Building. Revised temporary stabilized construction entrance and rip rap outlets at proposed Drainage Areas. Removed compressed air lines from the plan view.
- 10. Replace Drawing C-2.1 (30" Force Main Plan & Profile) with the revised Drawing C-2.1 attached to this Addendum #4. Added missing piping between proposed Surge Tank and Force Main on the plan view.
- 11. Replace Drawing C-2.3 (12" Maple Street Sewer Plan & Profile) with the revised Drawing C-2.2 attached to this Addendum #4. Added notes and existing sewer chimney to the profile.
- 12. Replace Drawing C-2.4 (42" River Road Sewer Plan & Profile) with the revised Drawing C-2.4 attached to this Addendum #4. Added notes to the profile. Revised callout to seismic joints.
- 13. Revise Typical Sanitary Manhole Details Drawing C-5.2 (Sewer & Force Main Details I) as follows:
 - a. Revise 'Typical Manhole for Sewers 72" Dia. and Larger' to read "Typical Manhole for Sewers 42" and Larger."
 - b. Revise 'Typical Manhole for Sewers Less Than 72" Dia." to read "Typical Manhole for Sewers Up To 36".'
- 14. Revise '42" Ø Class 54 D.I. Carrier Pipe' in the Casing Pipe Detail Typical Section on Drawing C-5.3 (Sewer & Force Main Details II) to read, '42" Ø Class 200 D.I. Carrier Pipe.'
- 15. Replace Drawing C-5.4 (Sewer & Force Main Details III) with the revised Drawing C-5.4 attached to this Addendum #4. Added sanitary doghouse manhole detail. Added seismic joint detail.
- 16. Revise '4" Class 2 Bituminous Concrete Base Course (Two Equal Lifts)' in the Typical Driveway/Parking Area Section Detail 6 on Drawing C-5.5 (Pavement & Sidewalk Details)to read '4" Class 1 Bituminous Concrete Base Course (Two Equal Lifts).'
- 17. Replace Drawing C-5.6 (Site Fixture Details) with the revised Drawing C-5.6 attached to this Addendum #4. Added framing, post, and rail sizes to Chain Link Fence and Double Swing Gate details. Inserted missing bollard detail text. Added "or equal" following named hydrant manufacturer in the hydrant detail.
- 18. Replace Drawing C-5.7 (Yard Piping, Erosion & Sedimentation Control Details) with the revised Drawing C-5.7 attached to this Addendum #4. Added Erosion Control Matting detail.
- 19. Replace Drawing ENV-5.1 (Environmental Details) with the revised Drawing ENV-5.1 attached to this Addendum #4. Added Waste Stockpile Area Bin Layout detail.

- 20. Replace Drawing A-1.1 (Ground Level Proposed Plan) with the revised Drawing A-1.1 attached to this Addendum #4. Added safety railing for the mechanical bar screens.
- 21. Replace Drawing A-1.12 (Ground Level Proposed Plan) with the revised Drawing A-1.12 attached to this Addendum #4. Added safety railing for the mechanical bar screens.
- 22. Replace Drawing A-2.1 (South Exterior Elevation) with the revised Drawing A-2.1 attached to this Addendum #4. Added callouts for control joints and expansion joints.
- 23. Replace Drawing A-2.2 (North Exterior Elevation) with the revised Drawing A-2.2 attached to this Addendum #4. Added callouts for control joints, expansion joints, and brick flashing.
- 24. Replace Drawing A-2.3 (East & West Exterior Elevations) with the revised Drawing A-2.3 attached to this Addendum #4. Added callouts for control joints and expansion joints.
- 25. Replace Drawing A-3.1 (Building Sections I) with the revised Drawing A-3.1 attached to this Addendum #4. Added safety railing for the mechanical bar screens in the Screenings & Grit Room.
- 26. Replace Drawing A-3.2 (Building Sections II) with the revised Drawing A-3.2 attached to this Addendum #4. Revised callout for Entry Canopy Details.
- 27. Revise spacing of the Honeycomb Vents from 32" O.C. to 24" O.C. in the Wall Section Detail 1 on Drawing A-3.3 (Wall Sections).
- 28. Replace Drawing A-5.3 (Flat Roof to Wall Connection) with the revised Drawing A-5.3 attached to this Addendum #4. Revised Details 1 and 2.
- 29. Revise spacing of the Honeycomb Vents from 32" O.C. to 24" O.C. in the Section Details 2 and 3 on Drawing A-5.2 (Floor to Wall Connections).
- 30. Revise spacing of the Honeycomb Vents from 32" O.C. to 24" O.C. in the "Structural Eave" and "Structural Rake" Details 1 and 2 on Drawing A-5.3 (Flat Roof to Wall Connection).
- 31. Replace Drawing A-5.4 (Pitched Roof to Wall Connection) with the revised Drawing A-5.4 attached to this Addendum #4. Added entry canopy Detail 3. Revised metal fascia wrap and soffit trim in the "Decorative Eave" Detail 1. Revised soffit callouts in the "Flashed Eave" Detail 2.
- 32. Replace Drawing A-5.5 (Foundation Wall Adjacent to Wet Well) with the revised Drawing A-5.5 attached to this Addendum #4. Added entry canopy Detail 4.
- 33. Revise the callout "EPDM Roof Membrane" in Detail 4 on Drawing A-5.7 (Access Hatch Details) to read "Carry EPDM Roof Membrane Min. 4" on Curb."
- 34. Replace Drawing A-5.8 (Typical Standing Seam Roof Details) with the revised Drawing A-5.8 attached to this Addendum #4. Revised Details 2 and 5.
- 35. Replace Drawing A-6.1 (Door Schedule, Window Schedule, Door & Window Types) with the revised Drawing A-6.1 attached to this Addendum #4. Added detail WS-1. Revised Door Schedule. Revised various details.
- 36. Replace Drawing A-6.2 (Door Details) with the revised Drawing A-6.2 attached to this Addendum #4. Added Enlarged Detail 3. Added Door and Expansion & Control Joint Notes. Revised various details.

- 37. Replace Drawing A-6.3 (Interior Finish Schedule & Details) with the revised Drawing A-6.3 attached to this Addendum #4. Added brick anchors to Overhead Coiling Door Section Detail 1.
- 38. Replace Drawing EP-1.2 (Process Piping Lower Level Plans) with the revised Drawing EP-1.2 attached to this Addendum #4. Added wet well level sensors to the Lower Level Plan. Revised compressed air piping material. Revised screenings wash press and grit washer drains.
- 39. Replace Drawing EP-3.2 (Process Piping Sections II) with the revised Drawing EP-3.2 attached to this Addendum #4. Miscellaneous revisions.
- 40. Replace Drawing EP-3.3 (Process Piping Sections III) with the revised Drawing EP- 3.3 attached to this Addendum #4. Revised callout to screen enclosure access panels.
- 41. Replace Drawing EP-5.1 (Process Piping Details) with the revised EP-5.1 attached to this Addendum #4. Added Stilling Well for Wet Well Level Sensors detail. Noted eccentric reducers in the Flow Meter Vault Detail.
- 42. Replace Drawing EP-5.3 (Surge Tank Detail) with the revised EP-5.3 attached to this Addendum #4. Add two (2) isolation valves on top of tank by Surge Tank OEM, for each 1" NPT air supply to tank. Add two (2) isolation valves, furnished by Surge Tank OEM, at each level detector assembly tap (heat trace and insulate valves). Add 4 inch gate valve, furnished by Surge Tank OEM, for flushing connection (heat trace and insulate valve). Four (4) inch Schedule 80 steel nozzle shall be furnished by Surge Tank OEM. Two (2) inch Sch. 80 steel nozzle (plant water connection) shall be furnished by Surge Tank OEM.
- 43. Replace Drawing PI-0.3 (Control System Architecture) with the revised Drawing PI-0.3 attached to this Addendum #4. Revised for Communications PLC and Cellular Modem and revised note.
- 44. Replace Drawing PI-1.3 (P&ID Odor Control and Chemical Feed) with the revised Drawing PI-1.3 (P&ID Other Systems) attached to this Addendum #4. Revised for drawing title and surge relief system modifications.
- 45. Replace Drawing E-1.1 (One-Line Diagram) with the revised Drawing E-1.1 attached to this Addendum #4. Revised note.

<u>ITEM #7 – TECHNICAL SPECIFICATIONS</u>

<u>Section 700 – Measurement and Payment</u>. Delete Section 700 in its entirety and replace with the revised Section 700 attached to this Addendum #4.

<u>Section 01525 – Temporary Waste Stockpile Area.</u> Delete paragraph 1.01B and replace with the following:

B. The Owner shall designate a site for purposes of the WSA for this Project. The Owner shall make arrangements with the property owner to secure the site for the Contractor's use for Work of this Project

<u>Section 01600 – Product Requirements</u>. Delete paragraph 2.1A.6 in its entirety.

<u>Section 01650 – Start Up Testing</u>. Delete Section 01650 in its entirety and replace with the revised Section 01650 attached to this Addendum #4. Revised to include requirement that start up may commence only after all sanitary flows are directed to the new Pump Station.

Section 02062 – Temporary Bypass Pumping.

- 1. Delete paragraph 1.2C in its entirety and renumber subsequent paragraphs accordingly in sequential order. A bypass plan is not required to be submitted with the Bid Proposal.
- 2. Revise paragraph 1.5A.1.b, c and d to read as follows:

b. East Main Street Sewer (36 Inch): Peak: 7,000 gpm

c. River Road (30 Inch): Peak: N/A

d. River Road Sewer (42 Inch): Peak: 7,000 gpm

3. Revise "END OF SECTION 0312320" to read, "END OF SECTION."

<u>Section 02090 – Lead Paint Awareness</u>. Delete the third sentence, "Lead readings contained in the report are included as an attachment to this Specification." from paragraph 1.2D.

<u>Section 02433 – Pipe Crossing Under Railroad and State Highway</u>. Delete Section 02433 in its entirety and replace with the revised Section 02433 attached to this Addendum #4. Revised line and grade tolerances.

<u>Section 02615 – Force Main Piping.</u> Delete Section 02615 in its entirety and replace with the revised Section 02615 attached to this Addendum #4. Added compressed air piping specification and seismic rated joints at surge tank and at pipe bridge crossing. Miscellaneous revisions. Delete "or approved equal" and replace with "Or Equal".

<u>Section 02651 – Sub-Aqueous Force Main Crossing</u>. Add to the Contract Documents the new Specification Section 02651 attached to this Addendum #4.

Section 02821 – Chain-Link Fences and Gates. Revise paragraph 2.02A.2 to read as follows:

2. Fence Height: 8 feet.

<u>Section 042200 – Concrete Unit Masonry</u>. Delete paragraphs 2.2D.1.a and b in their entirety and replace with the following:

- a. Polished CMU Interior Location: One row of accent block in Vestibule #101 & Hall Way #102. Refer to Drawing A-4.2 for location.
- b. Ground Face Interior Location: Up to ceiling height in Vestibule #101 & Hall Way #102.

<u>Section 072500 – Weather Barriers</u>. Delete Section 072500 in its entirety and replace with the revised Section 072500 attached to this Addendum #4.

<u>Section 083323 – Overhead Coiling Doors.</u> Delete Section 083323 in its entirety and replace with the revised Section 083323 attached to this Addendum #4.

Section 087100 – Door Hardware.

- 1. Add the following paragraph 2.2G.4:
 - 4. Rated doors shall not be provided with holders.

2. Delete paragraph 3.6 (Door Hardware Schedule) in its entirety and replace with the revised paragraph 3.6 as follows:

3.6 DOOR HARDWARE SCHEDULE: Rated doors shall not be provided with holders

A. HW-1 Aluminum Entrance Doors: 101A

3 pair Hinges 1 Lockset – Function by Door Hardware Supplier

1 Set manual Flush Bolts 2 Closers

2 Holders 1 Set Weather strip

2 Door Bottoms 1 Threshold

B. HW-1 Aluminum Interior Doors: 101B
3 pair Hinges 1 Lockset
1 Set Flush Bolts 2 Closers
2 Holders 2 Door Bottoms

C. HW-2 Brushed Stainless Steel Exterior Doors: 103B, 105A, 105C, 115A, 115B, 1B & 3

3 Hinges 1 Lockset – Function by Door Hardware Supplier

1 Set Weather Strip1 Closer/Holder1 Threshold1 Exit Device

D. HW-3 Brushed Stainless Steel Interior Doors: 114B, 1A and 2.

3 Hinges 1 Lockset – Function by Door Hardware Supplier

1 Closer1 Exit Device

E. HW-4 Painted Hollow Metal Exterior Doors: 108B and 109B

3 Hinges 1 Lockset – Function by Door Hardware Supplier

1 Set Flush Bolts 1 Holder

1 Closer 1 Set Weather Strip

1 Door Bottom 1 Threshold

F. HW-5 Painted Hollow Metal Exterior Doors (Double Doors): 114C

3 Pair Hinges 1 Lockset – Function by Door Hardware Supplier

2 Closers 1 Set Flush Bolts on the inactive leaf

2 Door Bottoms1 Weather Strip2 Holders1 Threshold

1 Exit Device on the 3' leaf only

G. HW-6 Painted Hollow Metal Rated Doors: 103A and 114 A

3 Hinges 1 Lockset – Function by Door Hardware Supplier

1 Closer 1 Exit Device (for 114A)

1 Door Bottom

H. HW-7 Painted Hollow Metal Interior Doors: 109A, 110 and 112

3 Hinges 1 Passage Set for 109A

1 Closer 1 Holder

2 Privacy Sets for 110 & 112

I. HW-7 Painted Hollow Metal Interior Doors: 106, 108A, 113 and 116.

3 Hinges 1 Lockset – Function by Door Hardware Supplier

1 Closer 1 Holder

<u>Section 09960 – High Performance Coatings</u>

- 1. Section 1.2 A. Add the following:
 - "6. Structural Drawing S-9.1 Utility Bridge
- 2. Section 1.2 B.8. Delete "d. Galvanized Metal" and replace with the following:
 - "d. Galvanized Metal including 42 inch Pipeline Utility Bridge
- 3. Immediately following Section 2.3.D.1. "Galvanized Steel Pipe, and Miscellaneous Fabrications" pp. 11 insert the following:
 - "D. GALVANIZED STEEL UTILITY BRIDGE:
 - 1. EXTERIOR:
 - a. Shop Surface Preparation: SSPC-SP1 Solvent Cleaning and SSPC-SP7 Brush-

Off-Blast Cleaning to achieve a uniform 1.0-1.5 mil

profile.

b. Shop Primer Coat: Series 90G-1K97TnemeZinc(galvi touch-up)

i) Dry Film Thickness: 2.5 to 3.5 mils

c. Shop Prime Coat: Series N69 Hi-Build Epoxoline

i) Dry Film Thickness: 3.0 to 4.0 mils

d. Shop Finish Coat: Series 73 Endura-shield

i) Dry Film Thickness: 2.5 to 5.0 mils

- e. Total Dry Film Thickness: 8.0 to 12.5 mils"
- 4. Immediately following "Galvanized Steel Pipe, and Miscellaneous Fabrications" pp. 23 (PAINT SCHEDULE) insert the following:

D. GALVANIZED STEEL – UTILITY BRIDGE			
1. Exterior			
Spot Prime Coat:	Corothane I Galvapac Zinc	Series 90G-1K97 Tneme-Zinc	2.5 - 3.5 mils
	3.0 - 4.0 mils	Series N69 Hi-Build Epoxoline II	3.0 - 4.0 mils
Shop Prime Coat:	Macropoxy 646 Fast Cure 3.0 – 4.0 mils	Series 73 Endura-Shield	2.5 - 5.0 mils
Shop Finish Coat:	Acrolon 218 HS	0.0 10.5 "	
	3.0 – 6.0 mils	8.0 – 12.5 mils	
Total DFT:	9.0 – 14.0 mils		

- 5. Painting Schedule pp. 23 Galvanized Steel Pipe, And Miscellaneous Fabrications, change to:
 - "Galvanized Steel Pipe, Utility Bridge, and Miscellaneous Fabrications"
- 6. Painting Schedule pp. 21 Section 13965 Hydropneumatic Surge Control System 2.01 Hydropneumatic Surge Tank, change to:

Section 107500 – Flagpoles.

- 1. Revise paragraphs 1.3A.1 and 2 to read as follows:
 - 1. Seismic Loads: According to SEI/ASCE7 and requirements noted on Drawing S-0.1.
 - 2. Wind Loads: According to NAAMM FP 1001, "Guide Specifications for Design of Metal Flagpoles" and requirements noted on Drawing S-0.1.
- 2. Revise paragraph 1.4D.1 to read as follows:
 - 1. Include loads, point reactions, and foundation design.
- 3. Revise paragraph 2.2B to read as follows:
 - B. Exposed Height: 25 feet
- 4. Add the following sentence to the end of paragraph 3.2C:

"Coordinate location and secure PVC ground sleeve."

5. Add the following sentence to the end of paragraph 3.3C:

"Provide cement or waterproof compound at top of sleeve and then cover with cap plate."

<u>Section 11060 Interior Process Piping and Appurtenances</u>. Delete Section 11060 in its entirety and replace with the revised Section 11060 attached to this Addendum #4.

<u>Section 11070 Interior Valves and Appurtenances</u>. Delete Section 11070 in its entirety and replace with the revised Section 11070 attached to this Addendum #4. Added specification for combination air valve specification. Revised plug valve and check valve specifications. Revised plug valve schedule.

<u>Section 11322 – Grit Removal System.</u> Delete Section 11322 in its entirety and replace with the revised Section 11322 attached to this Addendum #4. Removed pre-qualification language. Added "Or Equal" to list of manufacturers. Added Class I, Division 1, Group D explosion proof electrical environment. Miscellaneous revisions and corrections.

<u>Section 11330 – Mechanical Bar Screen</u>. Delete Section 11330 in its entirety and replace with the revised Section 11330 attached to this Addendum #4. Removed pre-qualification language. Added Vulcan Industries and "Or Equal" to list of manufacturers. Miscellaneous revisions and corrections.

<u>Section 11331 – Screenings Wash Press.</u> Delete Section 11331 in its entirety and replace with the revised Section 11331 attached to this Addendum #4. Removed pre-qualification language. Added "Or Equal" list of manufacturers. Miscellaneous revisions and corrections.

<u>Section 11540A – Dry Weather Submersible Sewage Pumps</u>. Delete Section 11540A in its entirety and replace with revised Section 11540A attached to this Addendum #4. Added "Or Equal" to Acceptable Manufacturers and "Or Equal" to acceptable pump impellers (2.7.E). Added Computational Fluid Dynamic analysis requirements.

<u>Section 11540B – Wet Weather Submersible Sewage Pumps</u>. Delete Section 11540B in its entirety and replace with revised Section 11540B attached to this Addendum #4. Added "Or Equal" to Acceptable

Manufacturers and "Or Equal" to acceptable pump impellers (2.7.E). Added Computational Fluid Dynamic analysis requirements.

Section 11680 – Computers and Miscellaneous Equipment.

1. <u>Acceptable Manufacturers</u> – Delete Item 2.2.B.2. in its entirety

Section 13228 – Odor Control System

1. Delete paragraph Item 1.3E in its entirety.

Section 13460 – Programmable Logic Controllers (PLC) & Related Control Panels.

- 1. <u>Communications PLC</u> Add the words "and Communications PLC" at the end of the title of paragraph 2.4.
- 2. <u>Communications PLC</u> Add the following sentences at the end of paragraph 2.4.A:

"Provide a Communications PLC (COM PLC) containing the polling logic to the Mattabassett District (that is expandable to future remote pumping stations in the City of Middletown) and isolates the main PLC from the cellular network through the use of a serial communications connection (for isolation) between the Main PLC and the COM PLC. The COM PLC shall be Allen Bradley Micrologix."

- 3. <u>Communications PLC</u> Replace Item 2.4.D in its entirety with the following:
 - "D. Coordinate equipment selection, programming, and testing with the Mattabassett District and their Systems Integrator so that they can set up their PLCs and message blocks accordingly. Note that the Mattabassett District will be responsible for paying for their own systems integrator services and hardware and is currently deploying a similar cellular communications system at their plant (for two remote meter stations) utilizing a Sierra Wireless LS-300 Cellular modem and a Micrologix 1100 Communications PLC containing the necessary polling logic."

Section 13965 – Hydropneumatic Surge Control System (issued by Addendum #3).

- 1. DUPLEX COMPRESSOR CONTROL SYSTEM: Delete paragraph 2.03N in its entirety and replace with the following:
 - "N. Low Pressure Switch with alarm light (amber) and dry contacts for SCADA system monitoring."
- 2. LEVEL CONTROL SYSTEM: Delete paragraph 2.04 D in its entirety and replace with the following:
 - "D. The Control Panel shall indirectly function to start and stop the compressor via the add-air solenoid valve and start/stop the compressor via a dry contact closure. In addition, one dry contact closure shall be provided in the panel for remote (plant SCADA system) indication of the following condition: high or low hydro pneumatic tank water level."

Section 14600 - Portable Davit Cranes.

1. Summary – Revise paragraph 1.01A to read as follows:

1.01 SUMMARY

- A. The Contractor shall furnish and install portable davit cranes and accessories as specified herein and as shown on the Drawings:
 - 1. One (1) crane, winch and base in the Screenings & Grit Room
 - 2. Three (3) bases at the Valve Vault Roof
- 2. <u>Warranty</u> Revise paragraph 1.06A to read as follows:

1.06 STANDARD WARRANTY

- A. The manufacturer shall warrant all equipment specified under this Section to be free from defects in material and workmanship for a period of two (2) years from the date of substantial completion. A written manufacturer's warranty shall be provided.
- 3. <u>Davit Crane</u> Revise paragraphs 2.01I and J to read as follows:

2.01 DAVIT CRANE

- I. Crane boom and mast shall be fabricated from AISI Type 304 stainless steel.
- J. Davit cranes shall be Series 5110 as manufactured by Thern, Inc., Halliday Products, or equal.
- 4. Crane Base Revise paragraphs 2.02A, B, and C to read as follows:

2.02 CRANE BASE

- A. Crane base shall be pedestal mount and shall allow for removal of the crane mast.
- B. Crane base shall be fabricated from AISI Type 304 stainless steel.
- C. Crane base shall be Model number 510SS by Thern, Inc. or equal.
- 5. Lifting Winch Revise paragraph 2.03C and D to read as follows:

2.03 LIFTING WINCH

- C. Lifting winch shall be fabricated from AISI Type 304 stainless steel.
- D. Model number M4042PBSS by Thern, Inc. or equal.
- 6. <u>Manufacturer's Field Services</u> Revise paragraph 3.04C to read as follows:

3.04 MANUFACTURER'S FIELD SERVICES

C. Review data in the operation and maintenance manuals. Refer to Section 01650, "Starting of Systems."

Section 15080 - Mechanical Insulation.

1. <u>Manufacturers</u> – Delete the words "an approved" from the first sentence of paragraph 2.1.A.

<u>Section 15125 – Meters and Gauges.</u>

- 1. <u>Manufacturers Item 2.1.A Manufacturers delete "or approved equal"</u>
- 2. <u>Manufacturers</u> Delete Item 2.1.A1.e in its entirety and replace with the following:
 - e. Or Equal.

Section 15140 – Domestic Water Piping.

- 1. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.1.A.
- 2. Manufacturers Add the words "or equal" to the end of paragraph 2.2.S.2.
- 3. <u>Manufacturers</u> Delete the word "approved" from the last sentence of paragraph 2.2.S.3.
- 4. <u>Manufacturers</u> Add the words "or equal" to the end of the second sentence of paragraph 2.10.A.
- 5. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.20.H.

<u>Section 15150 – Sanitary Waste and Vent Piping.</u>

1. <u>Manufacturers</u> – Delete the words "an approved" from the first sentence of paragraph 2.1.A.

Section 15181 – Hydronic Piping.

- 1. <u>Manufacturers</u> Add the words "or equal" at the end of the first sentence of paragraph 2.1.A.
- 2. Manufacturer Delete Item 2.1.A.13.e. in its entirety.
- 3. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.8.H.

Section 15185 – Heating and Cooling Pumps.

1. <u>Manufacturers</u> – Delete the words "an approved" from the first sentence of paragraph 2.2.L.

Section 15195 – Natural Gas Piping.

1. <u>Manufacturers</u> – Delete the words "an approved" from the first sentence of paragraph 2.1.A.

Section 15300 – Fire Protection Piping.

- 1. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.1.A.
- 2. Manufacturers Delete the word "approved" from the second sentence of paragraph 2.7.C.

Section 15410 – Plumbing Fixtures.

- 1. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.1.A.
- 2. <u>Manufacturers</u> Add the words "or equal" at the end of the first sentence of paragraph 2.2.A.
- 3. <u>Manufacturers</u> Add the words "or equal" at the end of paragraph 2.2.B.
- 4. <u>Manufacturers</u> Add the following sentence at the end of paragraph 2.2.C.

Alternate manufacturers and models as noted, or equal.

- 5. <u>Manufacturers</u> Add the following sentence at the end of paragraph 2.2.D.
 - Alternate manufacturers and models as noted, or equal.
- 6. <u>Manufacturers</u> Add the following sentence at the end of paragraph 2.2.E.

Alternate manufacturers and models as noted, or equal.

- 7. Manufacturers Add the following sentence at the end of paragraph 2.2.G.
 - Alternate manufacturers and models as noted, or equal.
- 8. <u>Manufacturers</u> Add the following sentence at the end of paragraph 2.3.C.

Alternate manufacturers and models as noted, or equal.

Section 15440 – Plumbing Pumps.

1. Manufacturers – Delete the word "approved" from the first sentence of paragraph 2.2.I.

Section 15480 – Water Heater.

- 1. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.1.A.
- 2. <u>Manufacturers</u> Add the words "or equal" at the end of the first sentence of paragraph 2.2.G.
- 3. <u>Manufacturers</u> Add the following sentence at the end of paragraph 2.4.B.

Alternate manufacturers and models as noted, or equal.

Section 15721 – Air Handling Unit.

- 1. <u>Manufacturers</u> Add the following sentence at the end of paragraph 2.1.B.
 - C. Alternate manufacturers and models as noted, or equal.

<u>Section 15732 – Packaged Roof Top Air Conditioning Unit.</u>

1. <u>Manufacturers</u> – Add the following sentence at the end of paragraph 2.1.B.

C. Alternate manufacturers and models as noted, or equal.

Section 15733 – Split Air Conditioning System.

- 1. <u>Manufacturers</u> Add the following sentence at the end of paragraph 2.1.C.
 - D. Alternate manufacturers and models as noted, or equal.
- 2. <u>Manufacturers</u> Delete the word "approved" from the fifth sentence of paragraph 2.2.

Section 15750 – Dehumidifier.

1. <u>Manufacturers</u> – Replace the word "approved" with the word "Or" in paragraph 2.1.J.2.

<u>Section 15760 – Terminal Heating and Cooling Units.</u>

- 1. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.1.F.
- 2. <u>Manufacturers</u> Add the following sentence at the end of paragraph 2.2.A.

Alternate manufacturers and models as noted, or equal.

3. <u>Manufacturers</u> – Delete the words "an approved" from the first sentence of paragraph 2.3.F.

<u>Section 15820 – Ductwork Accessories.</u>

- 1. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.1.G.
- 2. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.2.B.
- 3. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.3.A.3.
- 4. Manufacturers Delete the words "an approved" from the first sentence of paragraph 2.3.C.
- 5. Manufacturers Delete the words "an approved" from the first sentence of paragraph 2.5.B.
- 6. Manufacturers Delete the words "an approved" from the first sentence of paragraph 2.6.C.
- 7. Manufacturers Delete the words "an approved" from the first sentence of paragraph 2.7.B.
- 8. <u>Manufacturers</u> Add the following paragraph after paragraph 2.10.B.3:
 - 4. Or Equal

Section 15850 – Air Outlets and Inlets.

- 1. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.1.D.
- 2. <u>Manufacturers</u> Delete the words "an approved" from the first sentence of paragraph 2.3.D.
- 3. Manufacturers Delete the words "an approved" from the first sentence of paragraph 2.4.E.

Section 15935 – HVAC Control Systems.

1. <u>Manufacturers</u> – Delete the words "an approved" from the first sentence of paragraph 2.1.A.

<u>Section 16265 – AC Adjustable Frequency Drives.</u> Specification clarifications:

- 1. All AFDs are variable torque. Pumps are variable torque machines.
- 2. The AFD amperage ratings for the Wet Weather and Dry Weather Pumps are shown on Drawing E-1.1 issued by Addendum #3; the full load amperages for all other motors (such as the Grit Pumps and Odor Control Fan) shall be typical for their HP rating (21A for the 15HP Grit Pumps and 27A for 20HP Odor Control Fan).

Section 16420 – Solid State Reduced Voltage Motor Starters.

1. <u>Manufacturers</u> – Delete the word "approved" from the first sentence of paragraph 2.1.A.

ITEM #7 – PRODUCT PROPOSALS

<u>Calgon Carbon Corporation (CCG)</u> – The response to Item #4C of Addendum #3 is hereby revised for consistency with the State of Connecticut Department of Energy and Environmental Protection Clean Water Fund Procurement Regulations. Delete the response provided in Addendum #3 in its entirety and replace with the following:

C. Continental Carbon Group Inc. (CCG) proposes a different design than that specified. They propose their Titan radial-flow unit for the 10,000 CFM odor control unit.

The odor control system components and appurtenances were designed, sized and specified around the radial flow carbon adsorber system by ECS Environmental Solutions (ECS) of Belton, Texas. Proposed or-equal equipment will be reviewed during the submittal (Shop Drawing) review phase and not during the bidding phase. Refer to Sections 01330, Submittals and 13228, Odor Control Systems for requirements.

<u>Vulcan Industries Mechanical Bar Screen</u> – Model VMR-60B, as manufactured by Vulcan Industries, is added as a named manufacturer of the Mechanical Bar Screen equipment specified in Section 11330.

<u>Advanced Drainage Systems</u> – SaniTite HP Corrugated polypropylene sanitary sewer pipe will <u>not</u> be considered an acceptable alternative to PVC Gravity Sewer Pipe and is therefore not allowed on this project.

<u>Fairfield Service Company Mechanical Bar Screen and Washer Compactor</u> – Fairfield Service Company of Indiana will be considered for acceptability as an "Or Equal" to the specified equipment of Specification Sections 11330 and 11331 during the submittal (Shop Drawing) review phase.

ITEM #8 – PROSPECTIVE BIDDER'S QUESTIONS AND ANSWERS

BIDDING REQUIREMENTS

Q: Specs state that any "Contractor or Subcontractor performing work with a subcontract value in excess of \$500,000 shall each hold a current DAS Contractor Prequalification Certificate in 'Water Treatment Plants' from the State of Connecticut Department of Administrative Services..." It will

be a difficult to find non MEP subcontractors who are prequalified for "Water Treatment Plants." Can this be changed?

- A: The General Contractor and any MEP Subcontractor performing work with a subcontract value in excess of \$500,000 shall each hold a current DAS Contractor Prequalification Certificate in "Water Treatment Plants." All other Subcontractors performing work with a subcontract exceeding \$500,000 in value shall be also prequalified with the Department of Administrative Services
- Q: Specs indicate a 3% MBE and 5% WBE participation for this project. Addendum No. 3 indicates that all subs are required to meet the same insurance requirements as the general contractor. Please confirm that the Town of Middletown will not make any insurance concessions for minorities required for this project, or other small contractors, and that the Town of Middletown requires the same insurance from minorities and other small contractors as provided by the general contractor.
- A: The City reserves the right to amend amounts of coverage required and types of coverage provided based on the work or service to be performed. The City of Middletown will meet all legal obligations with regard to MBEs and WBEs.
- Q: Addendum #3 re-issued Section 700 Measurement and Payment. Please issue a new bid form.
- A: See revised "Bid Proposal" and revised Section 700 "Method of Measurement and Payment" as noted in this Addendum #4.

SPECIFICATIONS

- Q: Section 700 Measurement & Payment items #9 & #10 state that the micro-piles are paid by the actual feet of casing installed end to end. Detail 1 on S-5.6, S-9.1 and S-10.1 show the casing extending into the rock 12". How does the uncased portion of the pile in the rock get paid for?
- A: See revised "Bid Proposal" and revised Section 700 "Method of Measurement and Payment" as noted in this Addendum #4.
- Q: <u>Section 02062</u> Temporary Bypass Pumping section 1.5A lists the flow of the Maple Street Sewer. What is the peak flow for East Main Street Sewer 36", River Rd 30" Sewer and River Rd 42" Sewer?
- A: See revised Section 02062 as noted in this Addendum #4.
- Q: Section 02062 Temporary Bypass Pumping Section 1.2C states "The Contractor shall prepare with the Subcontractor a specific, detailed description of the proposed pumping system and submit it and the Subcontractor's references with its Bid Proposal. Bid proposals without an acceptable detailed plan for the temporary bypass pumping plan will be rejected." This is not listed as one of the 17 items listed in the "Contractor's Checklist" on page BID-1. Do we need to submit with our bid proposal the bypass pumping description and subcontractor's references?
- A: A bypass plan with subcontractor references is not required to be submitted with the Bid Proposal but shall be submitted as a Contractor's submittal during construction.
- Q: <u>Section 02090</u> Lead Based Paint Awareness paragraph 3.10A states 'The lead testing report for 34 East Main Street buildings indicates that certain building components contain "toxic" levels lead paint.' Has this report been published for contractor viewing?
- A: The report is available on the City of Middletown web site (http://www.middletownct.gov) as stated in Section 02090 paragraph 1.2D.

- Q: <u>Section 083323</u> Overhead Coiling Doors: The R value specified is 10.9. Cornell offers a max R value of 8.0. Is 8.0 R value acceptable?
- A: Yes.
- Q: <u>Section 083323</u> Overhead Coiling Doors: The spec calls out aluminum slats and large missile impact. Missile impact is not available with aluminum slats. Is missile impact with steel slats or no missile impact with aluminum slats required?
- A: Overhead coiling doors shall have steel slats with missile impact performance. See revised Section 083323 as noted in this Addendum #4.
- Q: <u>Section 083323</u> Overhead Coiling Doors: Spec calls out multiple warranty terms. Paragraph 1.9A states 3 years on everything except counterbalance spring & finish; 1.9B states 2 years on parts and components; 1.9C states 5 years on the finish. Cornell offers a 2-year warranty on all components including the finish. Is a 2-year warranty on all components acceptable?
- A: A 2-year warranty is unacceptable. The warranty shall be three (3) years as specified in the revised Section 083323 noted in this Addendum #4.
- Q: <u>Section 083323</u> Overhead Coiling Doors: Paragraph 2.6I.1 states locking to be both on the interior and exterior. The electrical plan only shows a control station on the interior so there is no reason for locking on the exterior. Is locking required on both interior & exterior and just interior?
- A: Locking shall be only from the inside. See revised Section 083323 as noted in this Addendum #4.
- Q: <u>Section 087100</u> Door Hardware calls for surface holders. These cannot be used on UL rated doors. Should electric magnetic holders be used?
- A: No holders shall be used for rated doors. See revised Section 087100 as noted in this Addendum #4.
- Q: <u>Section 092400</u> Portland Cement Plastering: Where is this scope on the project?
- A: Work for this Section of the Specifications is indicated by the callout "Synthetic Plaster" on the exterior elevation Drawings A-2.1, A-2, and A-2.3.
- Q: Section 101416 Plaques: Is this an Owner allowance or contractor furnished and installed item?
- A: The Plaque shall be furnished and installed by the Contractor. See revised Bid Proposal and revised Section 700 "Measurement and Payment" as noted in this Addendum #4.

CIVIL

- Q: Drawing C-2.3: The plan view shows three existing manholes (118, 117, 116) & four proposed new manholes (109,113,114,115). Please confirm this is correct and that we are re-using existing Manholes 118, 117, 116 which are currently tied into a 10" PVC sewer which is to be abandoned. There are conflicts between new manholes and existing these conflicts occur between the plan and the profile views.
- A: Existing MH 114, 115, 116, 117, and 118 will be reused with new inverts and new sewer piping. Proposed MH 109 and 113 will be new manhole installations. See revised Drawing C-2.3 noted in this Addendum #4.

- Q: In regards to the pipe bridge. The steel on this bridge is to be galvanized per sheet S-9.1, note 5.0 Finish. In 09960 there are conflicting notes as to whether galvanized coats or not. 09960-2, 1.2B 8 ... states that exterior substrates (including galvanized) are to be coated. 9960-2, 1.2C 1 ... states that galvanized metal shall not be coated unless specified otherwise. There is a system on sheet 09960-11 for exterior galvanized steel. Do we paint this bridge in the field or leave it exposed?
- A: The proposed Fabricated Steel Utility Bridge shall be galvanized and shall also receive shop prime and finish coats. See revised Section 09960 "High Performance Coatings" as noted in this Addendum #4.
- Q: Please clarify gasket type required for bell joints. Per spec 11060, flange gaskets are neoprene. Per spec 02615-5, 2.01.C, gaskets shall be neoprene or rubber. Can bell joint gaskets for DI pipe/fittings be SBR?
- A: SBR is acceptable gasket material for ductile iron pipe with push-on joints. See revised Section 02615 as noted in this Addendum #4.
- Q: Reference is made to "General Sequence of Construction" Note No. 7 on Plan Sheet G-0.4 which reads as follows "Install temporary Maple Street by-pass pump system and force main on the 10" sewer (Maple Street Sewer). The temporary force main will be tied into the existing 36" (East Main Street) manhole. This work must be completed prior to commencing any demolition work on the existing pump station." This work is shown on Plan Sheet C-1.5. The plan does not show a manhole on the existing 36" sewer coming in from East Main Street at the proposed tie-in location and the existing 36" sewer ties into the sanitary chamber at the existing pump station. The plan in fact shows the proposed 3" temporary force main being connected to propose San. MH 111 on the proposed 36" PVC sewer line from East Main Street which connects in to the new pump station. It would appear that the proposed temporary 3" force main needs to connect to the existing sanitary manhole (T.F. -= 24.70) in the western corner of the site. Please review and advise.
- A: See revised "General Sequence of Construction" notes on Drawing G-0.4 issued by Addendum 3.
- Q: The plans call for the piles below the existing buried tanks to be removed in their entirety. What type and size of piles were installed? To what depth were the piles driven/installed? What type of material is to be used to backfill any voids remaining after the piles are removed?
- A: Historic drawings, prepared by others, from the Owner's archives were released with Addendum #2 and Addendum #3. These drawings include information on existing piles for the former treatment building, treatment tanks, and incinerator building. Voids remaining after the piles are removed from beneath the former treatment building and incinerator building may be backfilled with suitable onsite excavated material as specified in Section 02316 and with material specified in Section 102.
- Q: Do the piles for the 36" & 48" sewer pipe detail and the piles under MH #106 and 105 per callout on C-1.5 get paid for under bid Item #9?
- A: See revised "Bid Proposal" and revised Section 700 "Measurement and Payment" as noted in this Addendum #4.
- Q: Drawing C-1.5 calls SMH-114 proposed. Drawing C-2.3 names it as existing. Are we to install a new SMH-114?
- A: No, SMH 114 is an existing manhole. It is to be reused and incorporated into the Work as proposed sanitary MH 114. See revised Drawing C-2.3 noted in this Addendum #4.

- Q: Drawing G-0.4 General Note #06: The note states "All contractor personnel including subconsultants shall be 'HazWopper' and OSHA safety trained." Is it the intent that all personnel on the project be HAZWOPER trained or just those in direct contact with contaminated materials?
- A: All Contractor personnel, including sub-contractors and sub-consultants, coming in direct contact with hazardous and controlled materials shall possess the required level of HAZWOPER and OSHA training appropriate for the Work. See revised Drawing G-0.4 as noted in this Addendum #4.
- Q: Drawing C-1.5 A 4" water service for the facility is shown. No specifications for pipe, fittings, valves, etc. are provided in Division 2. Please provide applicable specifications.
- A: Water service mains shall be ductile iron pipe with push-on joints, cement-mortar interior lining, and Class 52 minimum wall thickness. Fittings shall be ductile iron with cement-mortar interior lining. Valves and accessories shall be as specified in Section 02615. See revised Section 02615 as noted in this Addendum #4.
- Q: Drawing C-2.1 show the 30"x24" reducers on either side of the flow meter vault as eccentric. Are the 2-30"x24" reducers eccentric on Drawing C-2.1?
- A: The reducers on each side of the proposed Flow Meter Vault shall be eccentric.
- Q: Is a 48" coupling required on the 48" sewer shown on drawing EP-1.2? This coupling is not shown on drawing C-2.4.
- A: The 48" coupling is required on the 48" sewer.
- Q: Please clarify what spec governs FLEXIBLE COUPLER on 36" PVC pipe called out on drawing C-2.2?
- A: See Section 02622 paragraph 2.04 for Repair Couplings.
- Q: Please clarify what spec governs FLEXIBLE COUPLER on 42" DIP pipe called out on drawing C-2.4?
- A: See Section 02622 paragraph 2.04 for Repair Couplings.
- Q: Detail 4 on drawing C-5.3 shows a transition coupling used outside of casing. Drawing C-2.4 shows a TELESCOPING SLEEVE outside of casing. Which is correct? Are both coupling and sleeve required outside of casings?
- A: The transition coupling shown on Detail 4 on Drawing C-5.3 pertains to proposed MH 103 and 104 and is intended to serve as a transition from the horizontal boring work to the open cut and cover work. The Telescoping sleeve with flexible joints pertains to both ends of the pipe bridge crossing. This coupling shall have both deflection and extension capabilities and shall consist of two (2) "TR TELE FLEX" couplings as manufactured by US Pipe and Foundry Corporation; "Flex Tend" Flexible "Expansion Joint as manufactured by EBAA Iron Corporation, or equal.
- Q: Based on statements made at the site walk thru held on January 8th it is our understanding that the only flow going into the existing pump station is from the 10" sewer line in Maple Street. Please confirm as to whether this understanding is correct or not.

- A: Flows are conveyed through two sewer mains: 1) 10" from Maple Street to the Pump Building, and 2) 36" from East Main Street to the Sanitary Chamber adjacent to the Pump Building.
- Q: The plans call for Manhole 104 and the 42" DIP sewer between Manhole 105 and Manhole 104 to be installed on a pile supported foundation. If Deduct Alternate 2 is accepted do Manhole 104 and the 42" DIP sewer between Manhole 105 and Manhole 104 still get installed under the Base Bid? From a cost standpoint this would seem to make sense. Please clarify.
- A: See "Bid Proposal" form and revised Section 700 "Measurement and Payment" as noted in this Addendum 4.
- Q: Reference is made to the casing pipe detail shown on Plan Sheet C-5.3. After the 42" DIP sewer is installed in the 60" casing pipe, does the annular space between the pipes get filled with grout?
- A: No fill material is required in the annular space between the carrier and casing pipes.
- Q: The plans call for the installation of a 42" flexible coupler to be installed at Station 317+34 (See Plan Sheet C-2.4). Is this coupling the same as the transition coupling that is noted on the "End Seal & Spacing" detail on Plan Sheet C-5.3? If not, how many 42" flexible couplings and 42" transition couplings will be required to complete the installation of the 42" gravity sewer between Stations 311+00 and 317+50?
- A: No. Furnish and install flexible repair couplings and restrained solid sleeve couplings where shown on the Drawings.
- Q: The bridge stationing on Plan Sheet C-2.4 calls for a bridge length of 48 feet +/- whereas the stationing on Plan Sheet S-9.2 calls for a bridge length of 82 feet +/-. Please clarify.
- A: Refer to Drawing S-9.2 for purposes of bidding. The Contractor shall field verify the final locations for the utility bridge abutments based on the dimensions of the extended deflection and extending seismic couplings specified in Section 02615 noted in this Addendum #4.

ENVIRONMENTAL

- Q: Will the City of Middletown be providing a dump site for disposal of clean surplus material removed from this project? If so, where is the dump site located?
- A: There is no disposal site assigned by the Owner for surplus material excavated outside of the designated areas of environmental concern (AOECs, LLAOECs, GWAOECs).
- Q: Addendum #3 Drawings ENV-1.2 & ENV-1.3 still have discrepancies from the AOEC & LLAOEC designations indicated in Phase II Environmental Site Assessment specified in section 6.1 through 6.2 on pages 25 29.
- A: The number designations for the AOECs and LLAOECs contained in the Phase II Environmental Site Assessment (ESA) are associated with the reports only. The contract number designations for the AOECs and LLAOECs are indicated on the Addendum #3 Drawings. The physical limits of the AOECs and LLAOECs have not changed between the Phase II report and the Addendum #3 contract drawings. The Contractor should refer to the environmental data contained in the Phase II ESA report for the specific borings contained within the designated AOECs and LLAEOCs on the Addendum #3 Drawings to determine the contamination within each area.

- Q: Rough takeoff of the pump station excavation reveals 1800 CY of AEOC and 2000 CY of LLAOEC. If all of this material is required to be transported to the WSA, tested, held for 10 days in increments of 100 CY (Per section 01525) at a time it will take ~76 weeks for excavation of the pump station alone. Was this considered in the projects 2 year schedule?
- A: The 100 CY increment referenced in Section 01525 is for "incidental" waste and does not apply to the stockpiling of controlled material at the WSA. The bins constructed at a WSA typically hold 250 CY of controlled material per bin. Waste characterization (testing) is based on the specific requirements of the particular disposal facility or facilities selected by the Contractor. One (1) characterization sample is typically required for every 250 CY to 500 CY of stockpiled controlled material based on the sampling frequency required by the disposal facility. It can take up to ten (10) days to receive the results from the laboratory. See revised Drawing ENV-5.1 as noted in this Addendum #4 for details on constructing the WSA.
- Q: Is all LLAOEC soil considered over the CTDEEP RSR limits requiring disposal at a preapproved disposal location?
- A Soil within the designated LLAEOCs contain compounds at concentrations above method detection limits but below the CTDEEP RSR limits. This material can be reused within the Construction Limits of Disturbance without further testing in accordance with Section 00800 Notice to Contractor Environmental Investigations. Any excess material from the LLAOECs which cannot be reused within the Construction Limits of Disturbance will require disposal as a controlled material in accordance with Section 02215.
- Q: Can LLAOEC soil be reused on site?
- A: Yes.
- Q: Will all LLAOEC soil be required to be loaded to the WSA for Owner testing?
- A: No.
- Q: Can the contractor conduct in-situ testing and pre-characterize soil contamination levels in order to live load soil for removal from site?
- A: Yes. The Contractor will be required to submit to the intended disposal facility for approval an in-situ sampling and pre-characterization plan. The plan must meet the facility's specific sampling frequency and acceptance criteria.
- Q: If LLAOEC and AOEC soil is to be loaded to the 100 CY WSA, how will separation and testing be conducted?
- A: The 100 CY increment referenced in Section 01525 is for "incidental" waste and does not apply to the stockpiling of controlled material at the WSA. The bins constructed at a WSA typically hold 250 CY of controlled material per bin. Waste characterization (testing) is based on the specific requirements of the particular disposal facility or facilities selected by the Contractor. One (1) characterization sample is typically required for every 250 CY to 500 CY of stockpiled controlled material based on the sampling frequency required by the disposal facility. It can take up to ten (10) days to receive the results from the laboratory. See revised Drawing ENV-5.1 as noted in this Addendum #4 for details on constructing the WSA.
- Q: What will be the frequency per round of owner testing of the soil transported to the WSA for disposal?
- A: Waste characterization testing is based on the intended disposal facility. One (1) characterization sample is typically required for every 250 CY to 500 CY of stockpiled controlled material based on

- the specific sampling frequency of the intended disposal facility. The Contractor is encouraged to select a disposal facility or facilities that require characterization sampling on the higher end of this range because the laboratory testing results can require up to a 10-day turnaround.
- Q: To aid the lead abatement takeoff, will documents quantifying areas indicated to have high levels of lead (greater than 1.0 mg/cm2) be provided for the "1. Exterior and exterior concrete walls and baseboards in the Pumping Station Building, 2. Block walls, door casing and door frames in the Incinerator Building"
- A: There is no lead abatement work in this project.

ARCHITECTURAL

- Q: Refer to sheet A-3.2: At the overhand by the main entrance it states: "See Sheet A-5 xxxxx for details." Please provide details.
- A: See revised Drawing A-3.2 as noted in this Addendum #4. See Details 4 and 5 on Drawing A-5.3, Detail 3 on Drawing A-5.4, and Detail 4 on Drawing A-5.5 for details of the entry canopy.
- Q: Detail 3 on sheet A-5.2 calls for weather barrier in the cavity wall. When you reference specification section 072500 Weather Barriers it only pertains to Building Wrap or building paper, please supply spec for cavity wall weather barrier.
- A: See revised Section 072500 as noted in this Addendum #4.
- Q: On Drawing A-4.2, Detail 2, Control Room: Shows ground face CMU to below ceiling and one accent row of polished CMU. In specification section 042200, Item 2.2D, polished CMU to ceiling and one row of ground face accent is specified. Please Clarify.
- A: Install ground face CMU and polished CMU accent row per Detail 2 on Drawing A-4.2. Specification Section 042200 was revised accordingly as noted in this Addendum #4.
- Q: Please provide a specification section for the explosion resistant overhead doors.
- A: The overhead coiling doors (Section 083323) are not explosion resistant. The electric door operator enclosure shall be explosion proof in the Screenings & Grit Room.
- Q: Drawing A-6.3 Do the open channel walls and floors have an epoxy coating?
- A: Refer to Room B01 on the Interior Finishes Schedule (A-6.3).
- Q: Drawing A-5.2 Detail 3 shows a 2' x 6" thick perimeter of washed stone and cast stone curb. The Landscape drawing depicts loam and seed to the building's edge. Is this stone detail required? If so, where is the stone perimeter and curb located?
- A: Install cast stone curb and washed stone perimeter along the Pump Station building synthetic plaster foundation in unpaved areas. Drawing C-1.6 was revised as noted in this Addendum #4.
- Q: Drawing A-5.4 Detail 2 depicts spray applied fire resistive material on the exposed steel. No specifications for spray applied fire protection are included. Please provide applicable specifications.
- A: See Specification Section 078123 "Intumescent Fire Proofing."

- Q: Drawing A-2.1 The South exterior elevation shows synthetic plaster. Please provide the specifications for the synthetic plaster.
- A: See Specification Section 092400 "Portland Cement Plastering."
- Q: Drawing A-6.1 Door Schedule (Door 114C) Set calls for exit device each leaf, lock set one leaf and flush bolts inactive leaf. Is the intent to have 24" leaf with flush bolts and the 3'0" leaf with exit device? Or, exit device each leaf, omitting the flush bolts?
- A: Provide the 24" leaf with flush bolts and only the 3'-0" leaf with the exit device. See revised Specification Section 087100 "Door Hardware" as noted in this Addendum #4.
- Q: Drawing A-6.1 Door Schedule (Doors 110, 112) Set calls for passage sets on these doors. Typically these types of doors have privacy function locks. Should I figure privacy locks?
- A: Provide privacy locks for Doors 110 and 112. See revised Specification Section 087100 "Door Hardware" as noted in this Addendum #4.
- Q: Drawing A-6.1 Door Schedule (Doors 101A, 101B) These doors have 4" stiles and hardware set calls for mortise lock. A mortise lock has a depth of 4", minimum stile needed is 4 ½". Should I figure a custom narrower depth lock? Or, can the stiles be wider? We have in the past had issues with the aluminum glazing and extrusions interfering so a 6" stile works the best.
- A: Provide a 6" stile for Doors 101A and 101B. See revised Drawing A-6.1 as noted in this Addendum #4.
- Q: Drawings A-2.1, A-2.2 & A-2.3 call for the exposed concrete to be rubbed and painted. Does this refer to concrete stain per 09960-11, 2.3E?
- A: Yes. Above grade rubbed and painted concrete surfaces shall receive stain per Specification Section 09960 paragraph 2.3E.

STRUCTURAL

- Q: The plans call for double roller pipe supports to be installed on the prefabricated pipe bridge to support the 42" ductile iron sewer pipe (See Plan Sheet S-9.2). The suppliers that we have contacted have all told us that the largest roller pipe support manufactured is for a 30" pipe. Please provide us with the name of the manufacturer for the double roller pipe support detailed on Plan Sheet S-9.2 so that we may obtain a quote for the required materials.
- **A:** The roller supports shall be custom manufactured.

ENVIRONMENTAL PROCESS

- Q: Pressure gauge assemblies are shown to be connected to the process piping by ½" welded pipe bosses per detail on drawing EP-5.2. Can a direct tap on DIP be used in lieu of the welded boss?
- A: Pressure gauge assemblies shall be as detailed on Drawing EP-5.2. The Owner may consider a proposal for direct tapping during construction.
- Q: 12" DI 90 BEND called out in section 1 on EP-3.2 connecting to the dry weather pump should be 10". Please correct this drawing.
- A: See revised Drawing EP-3.2 as noted in this Addendum #4.

- Q: 16" DI 90 BEND called out in section 1 on EP-3.2 on discharge side of dry weather pump should be 12". Please correct this drawing.
- A: See revised Drawing EP-3.2 as noted in this Addendum #4.
- Q: Please clarify type of material required for wall sleeves used with Link Seal? Are sleeves A36 steel, Schedule 40 steel or 5S stainless?
- A: Wall sleeves shall be ductile iron. See revised Section 11060 as noted in this Addendum #4.
- Q: Please clarify if MJ sleeve or flex coupling is required on the 30" force main buried connection outside the pump station. Drawing C-2.1 calls out a "RESTRAINED SOLID SLEEVE" for 30" force main connection at pump station. Drawing EP-1.2, LOWER LEVEL PLAN, calls out '30" COUPLING' for 30" force main connection at pump station. Which is required? A sleeve or coupling?
- A: A restrained solid sleeve coupling is required on the 30" force main connection outside the Pump Station.
- Q: Reference drawing EP-3.2, AIR RELEASE VALVE DETAIL, shows a 5" high 8" flange outlet for combination air valve connection. Can a 30x8" flange tee be used for this connection?
- A: A 30"x8" flanged ductile iron tee fitting will be acceptable, provided there is sufficient clearance above the connection for the entire valve assembly.
- Q: WET WEATHER SUBMERSIBLE SEWAGE PUMPS Specification Section 11540-B, 1.1 D. Pump OEM shall include a computational Fluid Dynamics analysis based on three pumps running and ensure against swirl angles entering the pump suction. How should the simulation report be presented and what is the assessment criteria for the computational fluid dynamic analysis?
- A: See revised Specification Sections 11540A and 11540B as noted in this Addendum #4.
- Q: The Ductile Iron Yard Piping for this project has been specified to use Protecto 401 lining. Is the interior Ductile Iron Pipe to receive the same 401 lining?
- A: Yes.
- Q: Drawing S-10.1 per addendum 3 calls out for a 24" DI XTRA FLEX BEND AND FLEX COUPLING. Is the Flex Coupling intended to be a coupling defined by section 2.04 COUPLINGS on spec page 02615-6 or is this coupling intended to be a TRFLEX Telescoping sleeve?
- A: This is <u>not</u> a coupling defined by section 2.04 on Specification page 02615-6. It is a coupling with deflection and extension capabilities that consists of two "TR TELE FLEX" couplings as manufactured by US Pipe and Foundry Corporation; "Flex Tend" Flexible "Expansion Joint as manufactured by EBAA Iron Corporation, or equal.